



# UNITED STATES PATENT AND TRADEMARK OFFICE

*JL*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,527	03/15/2004	Earl Grim	98150C.PUS	1312

7590                    01/31/2005

Eugene E. Renz, Jr., P.C.  
205 North Monroe Street  
Post Office Box 2056  
Media, PA 19063-9056

EXAMINER

BLAU, STEPHEN LUTHER

ART UNIT	PAPER NUMBER
	3711

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/800,527	GRIM, EARL
	Examiner Stephen L. Blau	Art Unit 3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 August 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Priority***

1. It is noted that this application claims subject matter disclosed in a prior application. A reference to the prior application must be inserted as the first sentence of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included. The status of the prior application needs to be added.

### ***Specification***

2. The abstract of the disclosure is objected to because in page 7 lines 12-17 the description of figure 6 is inaccurate in that a photo is being discussed. Figure 6 does not have a photo. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-3 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2-3 and 9 refer to descriptions as shown in figures which causes the claims to be indefinite in that it is uncertain what the limits of the claim are. Figures should not be referred to in claims. All structure should be positively defined. Claim 3 is indefinite in that in line 9 the terms "and whose are is" does not make sense. Claim 9 is indefinite in that in line 1 the term "Ttl" does not make sense. Claim 10 is indefinite in that in line 6 the number "3" does not make sense. Claims 2 (Ln. 9) and 3 (Ln. 9) are indefinite in that the term "radius OR" is not understood. Claim 5 recites the limitation "the impact ellipse" in line 15. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3711

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Masghati.

Masghati discloses lie angle able to maintain an impact point of a golf ball on a face when the impact point is offset a center of mass in the form of a golfer able to hit a ball off center and still on the face (Fig. 9), a metal wood (Col. 6, Lns. 53-58), a driver (Col. 6, Lns. 28-33), a mass concentration higher in a toe and than a heel (Figs. 17, 19), a heel to toe bulge (Fig. 7) whose center is square to the face in the orientation as shown in figure 16, and an elliptical zone on a face whose major axis is generally perpendicular to a shaft able to produce the same distance in the form of a golfer being able to vary a swing to produce the same distances for different points on a face and an elliptical zone can exist on all golf club faces.

Since this is an apparatus claim weight is given to what the club is. Very little weight is giving to how it is made or how it is used (Claim 10).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masghati in view of Hueber.

Masghati discloses a line tangent to the top edge of a club face being tilted upwardly towards the toe at an angle greater than 2 degrees to the horizontal in the form of there are an infinite number of tangent lines including a greater than 2 degree line at a top edge of a club face due to the top face edge curving (Fig. 16).

Masghati lacks a lie angle being greater than about 60 degrees. Hueber discloses metal woods having a lie angle being greater than about 60 degrees (Claim 13) and a driver having a lie angle of 60 degrees (Table 3) in order to have a club which is able to hit shots which standard clubs are not designed to provide [0004]. In view of the publication of Hueber it would have been obvious to modify the club of Masghati to have a metal wood or Driver having a lie angle greater than about 60 degrees in order to have a club which is able to hit shots which standard clubs are not designed to provide.

9. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masghati in view of Hueber and Toulon or Hasebe.

Masghati discloses a height of a clubface (Fig. 16).

Masghati lacks a height of a clubface as measured from a top edge to a sole edge at its greatest point being greater than 47 mm. Hasebe (Fig. 5) or Toulon (Table I) disclose a height of a clubface as measured from a top edge to a sole edge at its greatest point being greater than 47 mm. In view of the references of Hasebe (Fig. 5) or

Toulon (Table I) it would have been obvious to modify the club of Masghati to have a height of a clubface as measured from a top edge to a sole edge at its greatest point being greater than 47 mm in order to have a large face for a golfer so during miss-hits a ball is still impacted.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hussey in view of Murtland and Hueber.

Hussey discloses lie angle able to maintain an impact point of a golf ball on a face when the impact point is offset a center of mass in the form of a golfer able to hit a ball off center and still on the face (Fig. 5) and an elliptical zone on a face whose major axis is generally perpendicular to a shaft able to produce the same distance in the form of a golfer being able to vary a swing to produce the same distances for different points on a face and an elliptical zone can exist on all golf faces of clubs.

Hussey lacks a lie angle being greater than about 60 degrees and a head bulge defined by a radius whose center is offset toward a heel and whose arc is swept from a heel to a toe of a face.

Hueber discloses woods having a lie angle being greater than about 60 degrees (Claim 13) and a driver having a lie angle of 60 degrees (Table 3) in order to have a club which is able to hit shots which standard clubs are not designed to provide [0004]. In view of the publication of Hueber it would have been obvious to modify the club of Hussey to have a driver having a lie angle greater than about 60 degrees in order to have a club which is able to hit shots which standard clubs are not designed to provide.

Murtland discloses a head bulge defined by a radius whose center is offset toward a heel (Abstract) and whose arc is swept from a heel to a toe of a face (Fig. 3) in order to produce a directional tendency (Abstract). In view of the patent of Murtland it would have been obvious to modify the club of Hussey to have a head bulge defined by a radius whose center is offset toward a heel and whose arc is swept from a heel to a toe of a face in order to produce a directional tendency.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masghati in view of Hueber and Nishimura.

Masghati lacks a club having a shaft length measured from a heel end of the sole to the butt end being between about 39 and 48 inches.

Hueber discloses a shaft length about 39 inches in the form of 38.5 inches (Table 3). In view of the publication of Hueber it would have been obvious to modify the club of Masghati to have a shaft length of between about 39 and 48 inches in order to maximize head velocity at impact when playing a round of golf. Nishimura discloses a club head having a shaft which contacts the sole of a head (Fig. 1) in order to prevent a shaft from bending and to solidly secure a shaft to a head (Col. 1, Lns. 30-60). In view of the patent of Nishimura it would have been obvious to modify the club of Masghati to have a shaft length measured from a heel end of the sole to the butt end by having a club length the same as a shaft length in order to prevent a shaft from bending and to solidly secure a shaft to a head.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Galloway in view of Murtland.

Galloway discloses a metal wood having a mass distribution of a head concentrated in a toe and heel and periphery of a head in the form of a hollow metal head (Fig. 4), a heel to toe bulge (Fig. 4), and a clubface design with a thickness distribution so to optimize performance in an elliptical zone (Figs. 1, 5).

Galloway lacks a bulge having a radius and whose radius is square to a face or offset towards a heel. Murtland discloses a head bulge defined by a radius whose center is offset toward a heel (Abstract) and whose arc is swept from a heel to a toe of a face (Fig. 3) in order to produce a directional tendency (Abstract). In view of the patent of Murtland it would have been obvious to modify the club of Galloway to have a head bulge defined by a radius whose center is offset toward a heel in order to produce a directional tendency.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Werner and MacKeil disclose elliptical zones.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (571) 272-4406. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the

Application/Control Number: 10/800,527  
Art Unit: 3711

Page 9

examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (571) 272-4415. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858. (TC 3700 Official Fax 703-872-9306)

slb/ 19 November 2005



**STEPHEN BLAU**  
**PRIMARY EXAMINER**